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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4

Co.	mplete if Known
Application Number	10/037,593
Filing Date	October 19, 2001
First Named Inventor	Matthew P. Kulig
Art Unit	2457
Examiner Name	Barbara N. Burgess
Attorney Docket Number	60022210-0157

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (if known)}	Publication Date Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines, Where Relevant Passages o Relevant Figures Appear			
	LC	US 5,077,665	12-31-1991	Silverman et al.				
	LD	US 5,740,244	04-14-1998	Indeck et al.	ŀ			
	LE	US 5,870,730	02-09-1999	Furuya et al.				
	LF	US 5,978,801	11-02-1999	Yuasa				
	LG	US 5,995,963	11-30-1999	Nanba et al.				
	LH	US 6,564,263 B1	05-13-2003	Bergman et al.				
	LI	US 6,850,906 B1	02-01-2005	Chadha et al.				
	LJ	US 6,870,837 B2	03-22-2005	Ho et al				
	LK	US 7,019,674 B2	03-28-2006	Cadambi et al.				
	LL	US 7,181,608 B2	02-20-2007	Fallon et al.				
	LM	US 7,251,629 B1	07-31-2007	Marynowski et al.				
	LN	US 7,286,564 B2	10-23-2007	Roberts				
	LO	US 2006/0259417 A1	11-16-2006	Marynowski et al.				
	LP	US 2006/0294059 A1	12-28-2006	Chamberlain et al.				
	LQ	US 2007/0067108 A1	03-22-2007	Buhler et al.				
	LR	US 2007/0078837 A1	04-05-2007	Indeck et al.				
	LS	US 2007/0118500 A1	05-24-2007	Indeck et al.				
	LT	US 2007/0130140 A1	06-07-2007	Cytron et al.				
	LU	US 2007/0174841 A1	07-26-2007	Chamberlain et al.				
	LV	US 2007/0277036 A1	11-29-2007	Chamberlain et al.				
	LW	US 2008/0114760 A1	05-15-2008	Indeck et al.				

Examiner	Date
Signature	Considered

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Substitu	ite for form 1449	A/PTO		Complete if Known		
				Application Number	10/037,593	
INFO	RMATION	DISCL	OSURE	Filing Date	October 19, 2001	
STATEMENT BY APPLICANT				First Named Inventor	Matthew P. Kulig	
				Art Unit	2457	
	(use as many	sheets a	s necessary)	Examiner Name	Barbara N. Burgess	
Sheet	2	of	4	Attorney Docket Number	60022210-0157	

	U.S. PATENT DOCUMENTS							
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	LX	US 2008/0126320 A1	05-29-2008	Indeck et al.				
	LY	US 2008/0133453 A1	06-05-2008	Indeck et al.				
	LZ	US 2008/0133519 A1	06-05-2008	Indeck et al.				

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Number Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆			
	MA	WO 03/100662 A2	12-04-2003	Washington University					
	MB	WO 2005/048134 A2	05-26-2005	Washington University					
	MC	WO 2006/096324 A2	09-14-2006	Washington University					
	MD	WO 2008/022036 A2	02-21-2008	Washington University & Becs Technology, Inc.					

Examiner	Date
Signature	Considered

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Substitu	Substitute for form 1449B/PTO		Complete if Known					
				Application Nu	mber	10/037,593		
INFORMATION DISCLOSURE		Filing Date		October 19, 2001				
STAT	STATEMENT BY APPLICANT		First Named In	ventor	Matthew P. Kulig			
		_		Group Art Unit		2457		
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Examiner Cite Include name of the author (in CAPI item (book, magazine, journal, serial)				ITAL LETTERS), title l, symposium, catalog, er, city and/or country v	etc.), date, page	(s), volume-issue number(s),	T ²	
	ME	ALTSCHUL, Stephen F., "Basic Local Alignment Search Tool", <u>Journal of Molecular Biology</u> , 215(3):403-410, Oct. 5, 1990. CAVNAR, William B. et al., "N-Gram-Based Text Categorization", <u>Proceedings of SDAIR-94, 3rd Annual Symposium on Document Analysis and Information Retrieval</u> , Las Vegas, pp. 161-175, 1994. FORGY, Charles L., "Rete: A Fast Algorithm for the Many Pattern/Many Object Pattern Match Problem", <u>Artificial Intelligence</u> , 19:17-37, 1982, Noth Holland; received May 1980, revised version received April 1981.						
	MF							
	MG						,	
	МН	HOINVILLE, J	ay R. et al., "Spatial	Noise Phenomer	na of Longit No. 6, Nove	udinal Magnetic Recording mber 1992, New York, NY.		
	Mi	JEANMOUGIN	I, François et al., "M ciences, 23(10): 403	lultiple sequence	alignment v	vith Clustal X", <u>Trends in</u>		
	MJ	JONES, K. Sparck et al., "A probabilistic model of information retrieval: development and status", <u>Information Processing and Management</u> , 36(6):779-840, Cambridge, UK, August 1998.						
	MK	JUNG, Bongjin et al., "Efficient VLSI for Lempel-Ziv Compression in Wireless Data Communication Networks", <u>IEEE Transactions on VLSI Systems</u> , 6(3):475-483, Sept. 1998, Institute of Electrical and Electronics Engineers, Washington, DC.						
	ML	PIRSCH, Peter, et al., "VLSI Architectures for Video Compression-A Survey", Proceedings of the IEEE, 83(2):220-246, February 1995, Institute of Electrical and Electronics Engineers, Washington, DC.						
Examine Signature				Date Considered				

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	INFORMATION BIGGI COURT					umber	10/037,593 October 19, 2001	
INFORMATION DISCLOSURE					Filing Date			
STAI	STATEMENT BY APPLICANT (use as many sheets as necessary)					nventor	Matthew P. Kulig	
						it	2457	
	(use as many	sheets	as necessary)	Examiner Na	me	Barbara N. Burgess	
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Examiner Initials*	Cite No.1	Inc ite	clude na m (book	, magazine, journal, serial	TAL LETTERS), ting , symposium, catalo r, city and/or country	g, etc.), date, page(hen appropriate), title of the s), volume-issue number(s),	T ²
	мм	RANGANATHAN, N. et al., "High-speed VLSI Designs for Lempel-Ziv-Based Data Compression", <u>IEEE Transactions on Circuits and Systems II: Analog and Digital Signal Processing</u> , 40(2):96-106, February 1993, Institute of Electrical and Electronics Engineers, Washington, DC.						
	MN	Fifth IEEE Padova, I	Interitaly, S	<u>national Workshop</u> ept. 11-13, 2000, p	on Computer <i>A</i> p. 217-221.	rchitectures f	g extraction", <u>Proceedings.</u> or Machine Perception,	
	МО	ROESCH, Martin, "Snort Lightweight Intrusion Detection for Networks", <u>Proceedings of LISA '99</u> : 13th Systems Administration Conference, pp. 229-238, Seattle, WA, Nov. 7-12, 1999.						
	MP	ROY, Kaushik, "A Bounded Search Algorithm for Segmented Channel Routing for FPGA'S and Associated Channel Architecture Issues", <u>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</u> , 12(11):1695 - 1705, Nov. 1993. THOMPSON, Julie D. et al., "The CLUSTAL_X windows interface: flexible strategies for multiple sequence alignment aided by quality analysis tools", <u>Nucleic Acids Research</u> , 25(24):4876-4882, Dec. 15, 1997; received September 24, 1997; revised and accepted Oct. 28, 1997.						
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